

# Diaphragm Valve Type 16 (Pneumatic Actuated Type AD) 15mm-50mm (1/2inch-2inch)

**Body Material**  
PVC

**Diaphragm Material**  
PTFE  
EPDM

**Connection Standard**  
Socket End JIS  
Socket End ASTM SCH80  
Socket End DIN  
Threaded End Rc  
Threaded End NPT  
Threaded End Rp  
Flanged End JIS 10K  
Flanged End ANSI CLASS150  
Flanged End DIN PN10

**Action**  
Double Acting  
Air to Open

**Option**  
Speed Controller  
Full Opening Adjustment Mechanism  
Indicator



## FEATURES

- Compact & Light Weight**  
The most suitable for limited piping space or parallel piping lines.
- Excellent corrosion resistance**  
All parts are made of thermoplastics and rubber.
- Excellent Durability.**  
More than 1 million times open and close.

## OPTIONAL EQUIPMENT

Combination No.	1	2	3	4	5*	6*
Speed Controller	-	○	-	○	-	○
Full Opening Adjustment Mechanism	-	-	○	○	○	○
Indicator	●	●	-	-	◎	◎

● Standard Equipment  
◎ Special Indicator  
※ Nominal Size 15mm(1/2"), 25mm(1") Only



▲Speed Controller



▲Full Opening Adjustment Mechanism



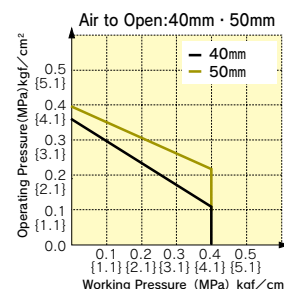
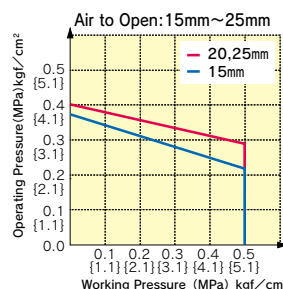
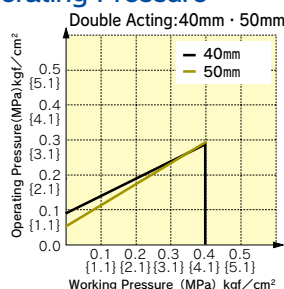
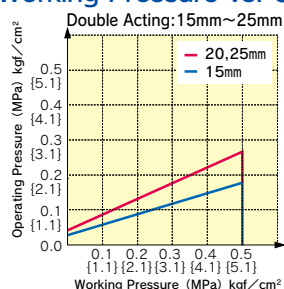
▲Full Opening Adjustment Mechanism Indicator

## ACTUATOR SPECIFICATION

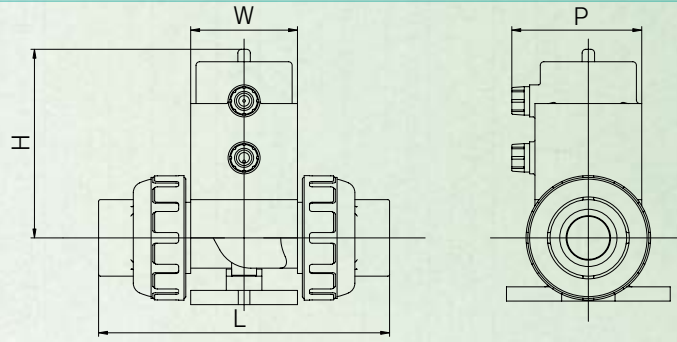
Nominal Size mm(inch)	15 (1/2inch)	20 (3/4inch)	25 (1inch)	40 (1 1/2inch)	50 (2inch)
Action	Air to Open, Double Acting				
Fluid	Pure water, Chemical				
Fluid Temperature	0-50°C(30-122° F)				
Working Pressure Range	0-0.5MPa [72.5PSI]			0-0.4MPa [58PSI]	
Back Pressure Range	0-0.2MPa [29PSI]				
Ambient Temperature	0-50°C(30-122° F)				
Frequency of Opening and Closing	With in 20 times/min			With in 15 times/min	
Connection	Socket End, Threaded End, Flange End				
Standard	JIS, DIN, ANSI				
Orifice Diameter	16mm(0.63inch)	22mm(0.87inch)	22mm(0.87inch)	40mm(1.57inch)	50mm(1.97inch)
Cv Value	4.8	8	9.5	26	44
Operating Pressure	Air to Open	0.4-0.5MPa [58-72.5PSI]			
	Double Acting	0.3-0.4MPa [43.5-58PSI]			
Air Supply Port Size	Rc1/8				
Installation Direction	Any direction				

note: Pay attention to Fluid temperature & Working pressure range.

### Working Pressure vs. Operating Pressure



DIMENSIONS FIGURE



DIMENSIONS TABLE

Unit:mm(inch)

Nominal Size			15(1/2)	20(3/4)	25(1)	40(1 1/2)	50(2)
Flanged End	L	JIS	158.0(6.22)	191.0(7.52)	205.5(8.09)	264.0(10.39)	297.0(11.69)
		ANSI	158.0(6.22)	191.0(7.52)	205.5(8.09)	263.9(10.39)	296.9(11.69)
		DIN	145.0(5.71)	169.0(6.65)	178.5(7.03)	252.0(9.92)	293.0(11.54)
Threaded End	L	JIS	117.0(4.61)	139.0(5.47)	149.0(5.87)	215.0(8.46)	260.0(10.24)
		ANSI	117.0(4.61)	139.0(5.47)	149.0(5.87)	215.0(8.46)	260.0(10.24)
		DIN	117.0(4.61)	139.0(5.47)	149.0(5.87)	215.0(8.46)	260.0(10.24)
Socket End	L	JIS	118.0(4.65)	138.0(5.43)	149.5(5.89)	216.0(8.50)	260.0(10.24)
		ANSI	118.0(4.65)	138.0(5.43)	149.5(5.89)	216.0(8.50)	260.0(10.24)
		DIN	118.0(4.65)	138.0(5.43)	149.5(5.89)	216.0(8.50)	260.0(10.24)
Common	H	-	79.0(3.11)	108.0(4.25)	109.0(4.29)	161.5(6.36)	188.5(7.42)
	W	-	50.0(1.97)	60.0(2.36)	60.0(2.36)	95.0(3.74)	115.0(4.53)
	P	-	63.0(2.48)	73.0(2.87)	73.0(2.87)	107.5(4.23)	128.0(5.04)

MODEL SELECTION TABLE

A16

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Acting	
DG	Air to Open
DF	Double Acting

Body Material	
U	PVC

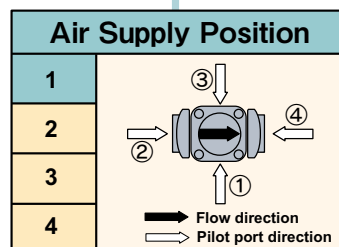
Nominal Size	
015	15mm(1/2")
020	20mm(3/4")
025	25mm(1")
040	40mm(1 1/2")
050	50mm(2")

Option	
1	No Option
2	Speed Controller
3	•Travel Stop
4	•Travel Stop •Speed Controller
5*	•Travel Stop •Indicator
6*	•Travel Stop •Speed Controller •Indicator

Sheet / O-ring Material	
1	PTFE/EPDM
2	PTFE/FKM
3	PTFE/Vifron®F
E	EPDM

Connection Standard	
SJ	Socket End JIS
S8	Socket End ASTM SCH80
SD	Socket End DIN
NJ	Threaded End Rc
NA	Threaded End NPT
ND	Threaded End Rp
F1	Flanged End JIS10K
FA	Flanged End ANSI CLASS150
FD	Flanged End DIN PN10

\*: Nominal Size 40mm and 50mm are not available.



(\*)  is Order Production Model